



www.gearsw6rhc.org

"Dedicated to Public Service"

THE RADIATOR



W6RHC

IRL #8170



P.O. Box 202 Chico, CA 95927-0508

February 2019 Newsletter

GEARS Founded August 13, 1939

Regular Events

O.A.R.S. GENERAL MEETING Second Friday, of month, 7:00 p.m., at St. Paul's Church Parish Hall, 1430 Pine St., Oroville

G.A.R.S. Second Thursday of month, 6:30 p.m. Lutheran Church Hall, Artois.

G.E.A.R.S General Meeting, third Friday of month, Butte County Search and Rescue Bldg., Chico. Social hour 6:00, meeting at 7:00.

GEARS Breakfast 2nd Saturday of each month 9am Farmers Skillet 1818, 690 Rio Lindo Ave, Chico Everyone Invited.

Board Meetings: 2nd Saturday of each month at the Blood Source Building, Rio Lindo Ave Chico, after the monthly breakfast.

Butte A.R.E.S. 3rd Tuesday at The Veterans Hall, Rio Lindo Chico. Except Nov & Dec.

FCC EXAMS - GEARS VEC First Sunday of every even numbered month, at the Butte County Search and Rescue Building. Written test at 2:00 p.m. For information or pre-registration call Gene Wright WA6ZRT 519-2519



Join GEARS on Facebook
www.facebook.com For timely news and additional information.

At our January meeting, we watched a short film on WWII radio communications. You can watch that film here: <https://youtu.be/Xfs4wS1oOUQ>
 One of the most iconic radios of that era was the SCR-536 handie talkie.

I got to thinking about how similar those radios were to the walkie talkies I had as a kid which gave me my first experience with two way radio. The feature article is about those old radios. I'm sure many of our members have similar experiences. Let's talk about this at our meeting or on our weekly net.

Also Kathy Favor will soon be placing an order for GEARS polo shirts, if you need one, please place your order now. Contact Kathy Favor 864-2742 kfavor@gmail.com

We have several members who are getting reestablished after the fire. If you have some spare equipment you could loan them please let us know. Keep in mind the GEARS auction at the May meeting for equipment you would like to sell.

73

Jim Matthews K6EST
jiminchico@yahoo.com
 530-893-3314

February Calendar

G.E.A.R.S General Meeting, Friday February 15th, Butte County Search and Rescue Bldg., Chico. Social hour 6:00, meeting at 7:00.

GEARS monthly breakfast Saturday February 9th, 9am at Farmers Skillet Cohasset and Rio Lindo Chico.

Board Meetings: Saturday February 9th after breakfast at the Blood Source Building

Butte A.R.E.S. MEET: February 19th, at Chico Veterans Hall 7pm. Contact Dale Anderson, KK6EVS 826-3461 for more information.

VEC Testing Sunday February 3rd at the Search and Rescue Building 2pm.

NETS:

GEARS Club Net Tuesdays 7:30 PM 146.850 MHz - PL 110.9

GARS Club Net: Monday, 7:00 pm 147.105 MHz + PL 110.09

Thursdays Simplex Net 7:30 p.m. 146.52

Sacramento Valley Traffic Net

Nightly 9:00 PM 146.850 MHz - PL 110.9

ARES Nets: Butte Mondays 20:00 145.290 MHz - PL 110.9

Yuba Sutter Thursdays 19:00 146.085 MHz + PL 127.3

Glenn Thursday 19:30 147.105 MHz + PL 100.0

Attention

GEARS Board of Directors has voted to replace the GEARS Polo Shirt and Badge for any members who lost theirs in Camp Fire. We will also cover your dues for 2019. Please contact Kathy Favor by the end of the month to order shirts and badges.

Since we need to order custom shirts in quantity, now is the time to purchase a GEARS polo shirt for all members. Please do so by the now. Contact Kathy Favor 864-2742 kfavor@gmail.com

How to talk with people about Amateur Radio

Many of us are eager to tell others about ham radio or to suggest that they get a license. It is always important to remember not to confuse them with technical talk. If the other person has little or no knowledge of radio or electronics, they won't know what you mean by terms like "40 Meters", "HF" or even something as basic as "Repeater." More importantly, if you confuse them, it will most likely just discourage any interest.

Instead, listen to what they find interesting about radio. Then explain in simple basic terms. If you do need to use a technical term, always define it. For example I explain that a "Repeater" is a radio relay station that allows radio to communicate over a large area.

Many off road and "prepper" types are interested in getting a Amateur Radio license, however they may feel that the electronics knowledge required for the test is too complicated. Reassure them that we all started at sometime and there are many good resources to learn this information.

GEARS will be offering classes in the near future when we find enough people interested in a class. Please pass the contact information for GEARS along. Refer them to our website or Facebook page.

The SCR-536 Handie Talkie

At our January meeting, we watched a short film on WWII radio communications. One of the most iconic radios of that era was the SCR-536 handie talkie.

The SCR-536 was a hand-held radio transceiver used by the US Army Signal Corps in World War II. It is popularly referred to as a walkie talkie, although it was originally designated a "handie talkie".

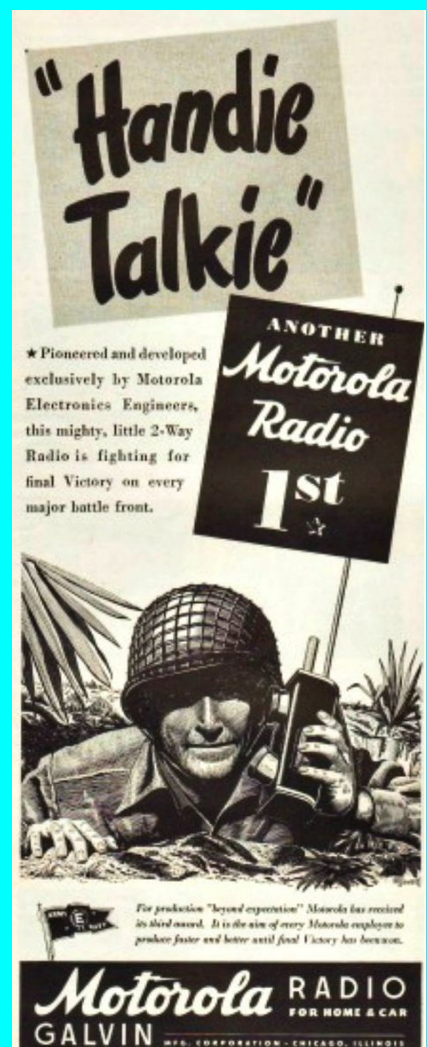
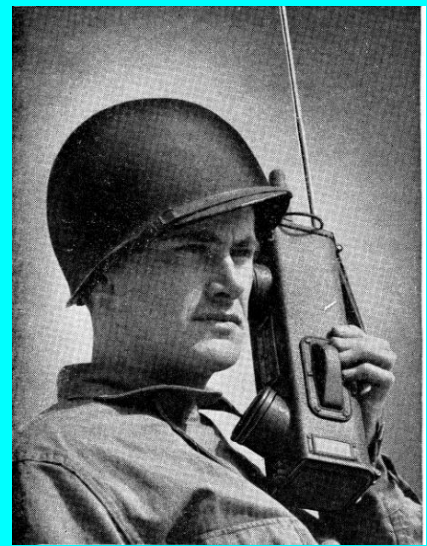
The SCR-536 is often considered the first of modern hand held, self-contained, "handie talkie" transceivers (two-way radios). It was developed in 1940 by a team led by Don Mitchell, chief engineer for Galvin Manufacturing (now Motorola) and was the first true hand-held unit to see widespread use. By July 1941, it was in mass production. In November 1942, the SCR-536 received coverage in the amateur radio magazine QST. It appeared on the cover as well as in Signal Corps advertising, and was featured as part of an article on the Signal Corps. "Smallest field unit of the Signal Corps" in which a photo caption read; "it is not much larger or heavier than a conventional handset". It was carried among the first waves to hit Omaha Beach at Normandy in June 1944 (and in Italy, Sicily and North Africa before that). Every rifle company of the U.S. 29th Infantry division had six; one for each of the three rifle platoons, two for the weapons platoon, and one for the company CO. The Germans were deeply impressed by the SCR-536 and the SCR-300 after capturing several units in Sicily. By war's end, 130,000 of the units had been manufactured by Motorola. They were also produced by other firms.

The SCR-536, which incorporated five vacuum tubes in a waterproof case, had no separate power switch. Instead the radio turned on when the antenna was pulled out, and off when it was retracted. There was no squelch and no volume control. It was powered by two batteries, 1.5 volt for filament and 103.5 volt battery for plate. These batteries would power the unit for 19 hours. The SCR-536 weighed 5 pounds with batteries and 3.85 lb without. The unit operated in AM voice mode between 3.5 and 6.0 MHz range. The unit operated on a single crystal controlled frequency. The SCR-536 had an RF output power of 360 milliwatts. The range of the unit varied with terrain; from a few hundred feet, to approximately one mile over land, and 3 miles over water. The short range is accounted for by the short antenna: on transmit it shows a low radiation resistance, so it couples to free space with low efficiency. The same is true on receive, with an alternative explanation: the shorter the receiving antenna, the less energy it can intercept ("collect"), and therefore deliver to the receiver.

Today, the SCR-536 is often restored and operated by vintage amateur radio enthusiasts and military radio collectors.

Read the full technical manual here

<https://www.ibiblio.org/hyperwar/USA/ref/TM/pdfs/TM11-235.pdf>



See one in operation here

<https://youtu.be/Pn2xOEuvax4>

How many of us played with walkie-talkies as kids?

For many of us our first experience with two-way radio was with a childhood set of walkie-talkies. Back in the 1960's inexpensive transistor sets were very popular. In many ways these were a transistorized version of the SCR-536. Most were only one crystal controlled frequency, which was usually CB channel 14 (27.125 MHz) AM modulation. Like the WWII predecessor there was no squelch or volume control. Most used 5 transistors and were powered by a single 9v battery.

Similar to the SCR-536 they had a limited range. I quickly noticed my range was less than a block around town, however they worked much better across water.

Do any of our members have a vintage set of walkie talkies around? If so please let me know.

Jim Matthews K6EST jiminchico@gmail.com



2019 Membership Dues

If you haven't already done so, please send in your dues, or better yet, bring it to the meeting. Your dues support A.R.E.S, our repeater, VEC testing, and other local amateur radio activities.

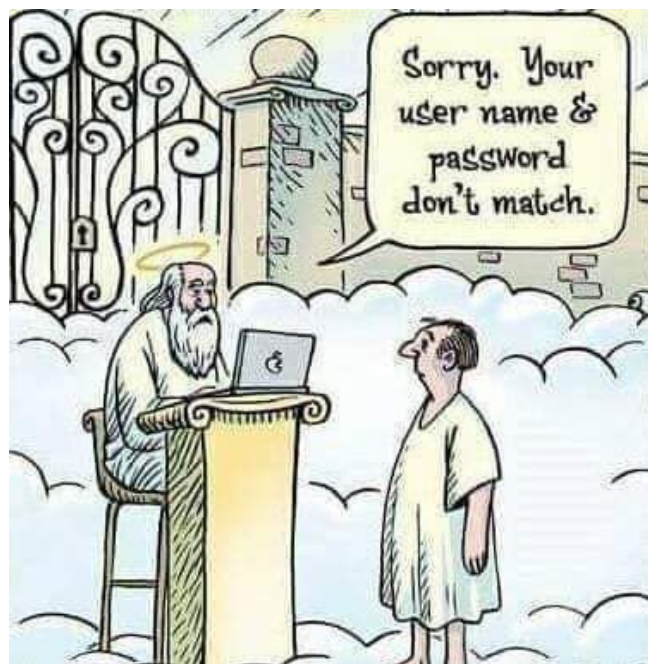
Club Officers:

President.....Jim Matthews, K6EST
Vice-President.....Kent Hastings, WA6ZFY
Secretary.....Stephen Lonis, KM6RSO
Treasurer.....Kathy Favor, K6FAV
Director.....Rick Hubbard, KI6VOS
Director.....Arnott Smith, KF2TM
Director..... Dale Anderson, KK6EVS
Past President.....Tom Rider, W6JS

DO YOU HAVE OLD QST MAGAZINES IN SEARCH OF A NEW HOME?

Gene Wright has that future home for your QST's, through his project to place QST Magazines in professional offices throughout Chico. Labels placed on the QST's will advertise the Golden Empire Amateur Radio Society, encourage the readers to consider Ham Radio as an interesting hobby, one of not only fun, but which provides opportunities for many and various community services. Bring your QST's to Gene at the Club meetings or contact:

Gene WA6ZRT
530-519-2519



Yes sir!
I spent forty years in electronics.

